FORM PTO-1449 (REV. 7-85)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

PD/4-32249A APPLICATION NO.
-NOT-YET KNOWN- 10/501,445
APPLICANT

BULUSU ET AL. **FILING DATE** HEREWITH

Group 1624

|                  |    |                 | U.S.          | PAT   | ENT DOCUMENTS                     |             |          |             |               |
|------------------|----|-----------------|---------------|-------|-----------------------------------|-------------|----------|-------------|---------------|
| EXAMINER INITIAL |    | DOCUMENT NUMBER | DATE          |       | NAME                              | CLASS       | SUBCLASS | FILI        | NG DATE       |
|                  | AA |                 |               |       |                                   |             |          |             |               |
|                  | AB |                 | , , , , , , , |       |                                   |             |          |             |               |
|                  | AC |                 |               |       |                                   |             |          |             |               |
|                  | AD |                 |               |       |                                   | ,           |          |             |               |
|                  | AE |                 |               |       |                                   |             |          |             |               |
|                  | AF |                 |               |       |                                   |             |          |             |               |
|                  | AG |                 |               |       |                                   |             |          |             |               |
|                  | АН |                 |               |       |                                   |             |          |             |               |
|                  | Al |                 |               |       |                                   |             |          |             |               |
|                  | AJ |                 |               |       |                                   |             |          |             |               |
|                  | AK |                 |               |       |                                   |             |          |             |               |
|                  | AL |                 |               | ·     |                                   |             |          |             |               |
|                  |    |                 | FOREIG        | N P   | ATENT DOCUMENTS                   |             |          |             |               |
|                  |    | DOCUMENT NUMBER | DATE          |       | OFFICE                            | CLASS       | SUBCLASS | TRAN<br>YES | SLATION<br>NO |
| DR               | АМ | 1 052 238       | 11/15/00      | EF    |                                   |             |          |             |               |
| DR               | AN | 99/35140        | 7/15/99       | W     | 0                                 |             |          |             |               |
|                  | AO |                 |               |       |                                   |             |          |             |               |
|                  | AP | ·               |               |       |                                   |             |          |             |               |
|                  | AQ |                 |               |       |                                   |             |          |             |               |
|                  |    | OTHER DOC       | UMENTS (      | Inclu | ding Author, Title, Date, Pertine | nt pages, E | tc.)     |             | •             |
|                  | AR | ·               |               |       |                                   |             |          | •           |               |
|                  | AS |                 |               |       |                                   |             |          |             |               |
| •                | АТ |                 |               |       |                                   |             |          |             |               |
| EXAMIN           | ER | /Deepak Rao/    |               |       | DATE CONSIDERED                   | 11/21/      | 2006     |             |               |

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

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FORM PTO-1449 (REV. 7-85) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

# **INFORMATION DISCLOSURE CITATION**

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ATTY. DOCKET NO. PD/4-32249A APPLICATION NO. 10/501,445 APPLICANT BULUSU ET AL. FILING DATE JULY 13, 2004

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## **U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE     | NAME                   | CLASS | SUBCLASS | FILING DATE |
|---------------------|----|-----------------|----------|------------------------|-------|----------|-------------|
| DR                  | AA | 4,351,939       | 9/28/82  | Simms, deceased et al. | 544   | 230      | 10/16/80    |
| DR                  | AB | 4,602,015       | 7/22/86  | Crisafulli et al.      | 514   | 252      | 6/21/84     |
| DR                  | AC | 4,659,363       | 4/21/87  | Hubele et al.          | 71    | 92       | 7/18/84     |
| DR                  | AD | 4,694,009       | 9/15/87  | Hubele et al.          | 514   | 269      | 6/19/85     |
| DR                  | AE | 4,802,909       | 2/7/89   | Rempfler et al.        | 71    | 92       | 10/9/87     |
| DR                  | AF | 4,808,333       | 2/28/89  | Huynh-ba et al.        | 252   | 299.66   | 7/24/85     |
| DR                  | AG | 4,973,690       | 11/27/90 | Rempfler et al.        | 544   | 279      | 4/3/89      |
| DR                  | АН | 4,999,046       | 3/12/91  | Rempfler               | 71    | 92       | 4/5/89      |
| DR                  | Aİ | 5,017,466       | 5/21/91  | Kobayashi et al.       | 430   | 558      | 5/23/90     |
| DR                  | AJ | 5,159,078       | 10/27/92 | Rempfler et al.        | 544   | 330      | 8/17/90 ·   |
| DR                  | AK | 5,516,775       | 5/14/96  | Zimmermann et al.      | 514   | 224.2    | 8/6/93      |
| DR                  | AL | 5,521,184       | 5/28/96  | Zimmermann             | 514   | 252      | 4/28/94     |

## **FOREIGN PATENT DOCUMENTS**

| DR AN |           | 3/18/70  | GB                    | <br> |  |   |
|-------|-----------|----------|-----------------------|------|--|---|
| DR AN | 2 001 069 |          |                       |      |  | 🗀 |
|       | 2 001 000 | 1/24/79  | GB                    | <br> |  |   |
| DR AC | 0 013 143 | 7/9/80   | EP                    | <br> |  |   |
| DR AP | 0 109 340 | 5/23/84  | EP (English Abstract) | <br> |  |   |
| OR AC | 0 164 204 | 12/11/85 | EP                    | <br> |  |   |

# AR AS AT EXAMINER /Deepak Rao/ DATE CONSIDERED 11/21/2006

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO. PD/4-32249A
APPLICATION NO. 10/501,445
APPLICANT
BULUSU ET AL. FILING DATE
JULY 13, 2004

Group 1624

|                     |                      |   | U.S. I  | PATE           | NT DOCUMENTS                            |              |          |      |         |
|---------------------|----------------------|---|---|----------------|---|--------------|----------|------|---------|
| EXAMINER<br>INITIAL |                      | DOCUMENT NUMBER   | DATE '  |                | NAME                                    | CLASS        | SUBCLASS | FILI | NG DATE |
| DR                  | ВА                   | 6,107,301   | 8/22/00   | Aldr           | ich et al.                              | 514          | 258      | 8/5/ | 97      |
| DR                  | ВВ                   | 6,187,781   | 2/13/01   | Nak            | azato et al.                            | 514          | 275      | 9/21 | 1/99    |
| DR                  | вс                   | 6,576,631   | 6/10/03   | Shib           | oata et al.                             | 514          | 241      | 5/8/ | 01      |
|                     | BD                   |   |   | ļ·             |   |              |          |      |         |
|                     | BE                   |   |   | 1              |   | <del> </del> |          |      |         |
|                     | BF                   |   |   | 1              |   |              |          |      |         |
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|                     | вн                   |   |   | İ              |   | <del> </del> |          |      |         |
|                     | ВІ                   |   |   |                |   |              |          |      |         |
|                     | BJ                   |   |   |                |   |              |          |      |         |
| -                   | вк                   |   | •   |                |   | <u> </u>     |          |      |         |
|                     | BL                   |   |   |                | 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - |              |          | 1    |         |
|                     | •                    |   | FOREIG  | N PA           | TENT DOCUMENTS                          |              |          |      |         |
|                     |                      |   |   | 1              |   |              |          | TRAN | SLATION |
|                     |                      | DOCUMENT NUMBER   | DATE  |                | OFFICE                                  | CLASS        | SUBCLASS | YES  | NO      |
| DR                  | ВМ                   | 0 233 461   | 8/26/87   | EP             | OFFICE                                  | CLASS        | SUBCLASS | YES  | NO      |
| DR DR               | BM<br>BN             |   | ļ   | EP<br>EP       | OFFICE                                  | CLASS        | SUBCLASS | YES  | NO D    |
|                     |                      | 0 233 461   | 8/26/87   | +              | OFFICE                                  |              | SUBCLASS | YES  | NO      |
| DR                  | BN                   | 0 233 461<br>0 243 136  | 8/26/87   | EP             |   |              | SUBCLASS | YES  | NO      |
| DR<br>DR            | BN<br>BO             | 0 233 461<br>0 243 136<br>0 254 259                           | 8/26/87<br>10/28/87<br>1/27/88                      | EP<br>EP       |   |              | SUBCLASS | YES  |         |
| DR DR DR            | BN<br>BO<br>BP       | 0 233 461<br>0 243 136<br>0 254 259<br>0 310 370<br>1 180 520 | 8/26/87<br>10/28/87<br>1/27/88<br>4/5/89<br>2/20/02 | EP<br>EP<br>EP |   |              |          | YES  |         |
| DR DR DR            | BN<br>BO<br>BP       | 0 233 461<br>0 243 136<br>0 254 259<br>0 310 370<br>1 180 520 | 8/26/87<br>10/28/87<br>1/27/88<br>4/5/89<br>2/20/02 | EP<br>EP<br>EP |   |              |          | YES  |         |
| DR DR DR            | BN<br>BO<br>BP<br>BQ | 0 233 461<br>0 243 136<br>0 254 259<br>0 310 370<br>1 180 520 | 8/26/87<br>10/28/87<br>1/27/88<br>4/5/89<br>2/20/02 | EP<br>EP<br>EP |   |              |          | YES  |         |
| DR DR DR            | BN<br>BO<br>BP<br>BQ | 0 233 461<br>0 243 136<br>0 254 259<br>0 310 370<br>1 180 520 | 8/26/87<br>10/28/87<br>1/27/88<br>4/5/89<br>2/20/02 | EP<br>EP<br>EP |   |              |          | YES  |         |

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Sheet 3 of 3

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Group 1624

### **FOREIGN PATENT DOCUMENTS**

| EXAMINER<br>INITIAL   |    | DOCUMENT NUMBER | DATE                       | OFFICE                                | CLASS        | SUBCLASS     | TRAN | SLATION  |
|-----------------------|----|-----------------|----------------------------|---------------------------------------|--------------|--------------|------|----------|
|                       | -  |                 |                            |                                       | <u> </u>     |              | YES  | NO       |
| DR                    | CA | 95/09847        | 4/13/95                    | wo                                    | :            |              |      |          |
| DR                    | СВ | 95/09851        | 4/13/95                    | wo                                    |              |              |      |          |
| DR                    | СС | 95/09853        | 4/13/95                    | wo                                    |              | <u> </u>     |      |          |
| DR                    | CD | 96/05177        | 2/22/96                    | wo                                    |              |              |      |          |
| DR                    | CE | 97/19065        | 5/29/97                    | wo                                    |              |              |      |          |
| DR                    | CF | 98/24782        | 6/11/98                    | wo                                    |              |              |      |          |
| DR                    | CG | 98/43968        | 10/8/98                    | wo                                    |              |              |      |          |
| DR                    | СН | 99/19305        | 4/22/99                    | wo                                    |              |              |      |          |
| DR                    | CI | 99/50250        | 10/7/99                    | wo                                    |              |              |      |          |
| DR                    | CJ | 00/18758        | 4/6/00                     | wo                                    |              |              |      |          |
| DR                    | СК | 00/39101        | 7/6/00                     | wo                                    |              |              |      |          |
| DR                    | CL | 00/78731        | 12/28/00                   | wo .                                  |              |              |      |          |
| DR                    | СМ | 01/58881        | 8/16/01                    | wo                                    |              |              |      |          |
|                       | CN |                 |                            |                                       |              |              |      |          |
|                       | СО |                 |                            |                                       |              |              |      |          |
|                       | СР |                 |                            |                                       |              |              |      |          |
|                       | CQ |                 |                            |                                       |              |              |      |          |
|                       | CR |                 |                            |                                       |              |              |      |          |
|                       | cs |                 |                            |                                       |              |              |      |          |
|                       | СТ |                 |                            |                                       |              |              |      |          |
|                       | CU |                 |                            |                                       |              |              |      |          |
|                       | CV |                 |                            |                                       |              | -            |      |          |
|                       | CW |                 |                            |                                       |              | <del>,</del> |      |          |
|                       | СХ |                 |                            |                                       |              |              |      | <u> </u> |
|                       | CY |                 |                            | · · · · · · · · · · · · · · · · · · · | 1            |              |      |          |
|                       | CZ | -               |                            |                                       | <del> </del> |              |      |          |
| EXAMINER /Deepak Rao/ |    |                 | DATE CONSIDERED 11/21/2006 |                                       |              |              |      |          |

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